

Ser. No.10/084,773  
Amdt. dated August 4, 2006  
Reply to Office action of May 4, 2006

PU020045

**Remarks/Arguments**

**35 U.S.C. §112, ¶ 2**

The Examiner has objected to claims 5, 10, and 15 as being indefinite. These claims have been amended to establish antecedent basis. It is submitted that the examiner's objection has been overcome and that these claims are in condition for allowance. Such action is respectfully requested.

**35 U.S.C. §103**

Claims 1-4, 6-9, 11-14, 16, and 17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Saunder in view of Godwin.

It is submitted that neither Saunders nor Godwin teach or suggest an outdoor unit for a satellite television ground system which provides

"the processed uplink signal to a satellite transmitting antenna **when the downlink circuitry is frequency locked** to signals from one of the first or second satellites"

as recited by the present claim 1. (emphasis added)

The present invention, as recited by claim 1, teaches a system wherein LEO and MEO satellites are used transmit broadcast television signals and receive data transmitted from an indoor unit. (page 7, lines 1-7) Since LEO and MEO satellites are not geosynchronous, high gain tracking antennas must be used to provide a high bandwidth continuous data link. (page 2, lines 1-3) It is therefore essential that the antenna is accurately tracking a satellite before the outdoor unit transmits a signal to the satellite. The system taught by the present invention advantageously ensures that the antenna is accurately tracking the satellite by transmitting only when the downlink circuitry is locked to a signal. (page 22, lines 19-20)

Additionally, the present invention, as recited by present claim 1, generates the transmit carrier offset frequency for the uplink transmitter from the integrator of the loop filter circuit of the carrier tracking loop of the demodulator (page 22, lines 30-32) This

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advantageously generates the transmit carrier offset frequency for the uplink transmitter in real time from a received signal from the same satellite. This method provides the most time accurate method of generating the transmit carrier offset frequency.

It is submitted that Saunders does not teach or suggest an outdoor unit for a satellite television ground system provides "the processed uplink signal to a satellite transmitting antenna when the downlink circuitry is frequency locked to signals from one of the first or second satellites" as recited by the present claim 1. It is submitted that Saunders teaches a system wherein "before transmitting, the user terminal monitors a downlink beach broadcast by the satellite to acquire initial timing information." (Col. 2, lines 52-57) This initial timing information is then used to generate a common symbol transmit rate for the uplink data in the uplink channel. (Col. 6, lines 6-9) Only after this common symbol transmit rate is established, the system of Saunders is ready to transmit the uplink channels to the satellite. Saunders does not teach or suggest that the uplink signal is transmitted only when the downlink circuitry is frequency locked as taught by the present invention.

It is submitted that Godwin does not teach or suggest a bidirectional system and therefore does not teach or suggest that the uplink signal is transmitted only when the downlink circuitry is frequency locked as taught by the present invention.

It is submitted therefore claim 1 is allowable over the combination of Saunders and Godwin and such action is respectfully requested. Furthermore, it is submitted that independent claims 6 and 11 are allowable for at least the same reasons that claim 1 is allowable and such action is respectfully requested. Since dependant claims 2-5, 7-10, and 12-17 are dependant from allowable independent claims, it is submitted that they too are allowable for at least the same reasons and such action is respectfully requested.


Having fully addressed the Examiner's rejections it is believed that, in view of the preceding amendments and remarks, this application stands in condition for allowance. Accordingly then, reconsideration and allowance are respectfully solicited. If, however, the Examiner is of the opinion that such action cannot be taken, the Examiner is invited to contact the applicant's representative at (609) 734-6804, so that a mutually convenient date and time for a telephonic interview may be scheduled.

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No fee is believed due. However, if a fee is due, please charge the additional fee to  
Deposit Account 07-0832.

Respectfully submitted,

  
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